

REPORT DOCUMENTATION PAGE

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4. TITLE AND SUBTITLE Testbed for Multi-Wavelength Optical Code Division Multiplexing Based on Passive Linear Unitary Filters				5. FUNDING NUMBERS F49620-96-1-0453	
6. AUTHOR(S) Eli Yablonovitch				8. PERFORMING ORGANIZATION REPORT NUMBER KD84Fintech-1	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) University of California, Los Angeles Electrical Engineering Dept. Los Angeles, CA 90095-1594				10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
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11. SUPPLEMENTARY NOTES The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official AFOSR position, policy or decision, unless so designated by the documentation.					
12 a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution unlimited				12 b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) The bandwidth demanded for Internet traffic has been constantly growing in response to more bandwidth hungry applications such as high-resolution motion picture transmission. An optical fiber has about 10 tera-bits per second (Tbps) available bandwidth and is the ideal medium to link tomorrow's bandwidth hungry applications. The equipment purchased under this grant has permitted UCLA to purchase a number of broad-band optical components, including especially some unique code division multiplexing filters that permitted us to demonstrate optical code division multiplexing of a multi-wavelength signal source.					
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Title: Testbed for Multi-Wavelength Optical Code Division Multiplexing Based on Passive Linear Unitary Filters
Award number: F49620-96-1-0453, PI: Eli Yablonovitch, PM: Alang Craig

Item	Vendor	Price
MC Modular Multi-channel Tunics	Photonetics Inc.	\$119,178.92
Temperature Controller	Newport Corp	\$2,115.29
Microblk Stage	Meeles Griot	\$4,094.38
Optical fibers	Newport Corp	\$1,842.77
DAT Drive	Fry's Electronics	\$1,485.16
Digital Oscilloscope	ITC Electronics	\$1,061.92
Rotator/Polarizor	Optics for Research	\$2,979.81
Laptop system (ethernet etc.)	Fry's Electronics	\$4,436.08
Dell Computer	Dell Marketing LP	\$2,217.15
CaibeSystem parts	Angeles Valve & Fitting Co.	\$763.23
High vacuum pump	Precision Instruments	\$1,623.75
Dell Optiflex Computer	Dell Marketing LP	\$7,658.54
TP-IB Frequency Tripler	Uniwave Technology Inc.	\$16,368.69
IR Camera	Electrophysics	\$6,038.61
MilleniaX-P SolidState Laser	Spectraphysics	\$32,232.05
Polarization splotters	JDS Fitel Inc.	\$8,321.04
Power supplies	Hewlette Packard	\$5,222.21
Measurement Device	Newport Corp	\$10,847.86
Laserjet 5M Color	Future Computing Services	\$5,144.93
Tunable Diode Laser System	New Focus Inc.	\$29,177.88
DSP Lock-in Amplifier	Stanford Research	\$4,008.79
Lightwave Multimter System	Hewlette Packard	\$7,756.00
Computer Systems	MicronElectronics	\$20,437.44
3-Port Circulator	Uniphase Telecom Products	\$6,500.58
Interferometer	Photonic Integration Research	\$24,272.50
Intel Dual Pentium	MicronElectronics	\$6,492.76
Toshiba Tecra 730X	Micro World	\$7,350.19
HP Lightwave Clock/Data receiver	Hewlette Packard	\$16,021.00
Laser Printer	KIS Computer Center	\$4,316.30
Millenia Pro Plus computer	Micron Electronics	\$10,064.42
SCANNING MONO-CHROMETER	Jobin Ivan Inc (I.S.A.)	\$5,000.25
DSP Lock-in-amplifier, Optical Chopper	Stanford Research	\$4,764.50
Total		\$379,795.00

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